BEFORE THE PUBLIC SERVICE COMMISSION,THE DEPARMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL, THE OFFICE OF MANAGEMENT AND BUDGET, AND CONTROLLER GENERAL OF THE STATE OF DELAWARE

PSC DOCKET NO. 06-241, REVIEW AND APPROVAL OF THE REQUEST FOR PROPOSALS FOR THE CONSTRUCTION OF NEW GENERATION RESOURCES UNDER 26 DEL. C. § 1007(d)

Comment of Jeremy Firestone on Executed PPA, IC Report, and Backup Generation Consideration Process

July 16, 2008

Introduction

On June 23, 2008, Delmarva Power and Bluewater Wind executed a Power Purchase Agreement (PPA) for offshore wind power generation. Subsequently, legislative changes upon which the PPA was premised were adopted by the General Assembly and signed by the Governor on June 25, 2008. The Independent Consultant (IC) issued his report in this matter on July 3. A hearing was held on July 8, 2008. It was decided to take written public comment until July 25 on the PPA and on the process going forward with negotiations on a natural gas PPA as part of the RFP docket. In this comment, I first address the IC report, I then address a couple of issues in the PPA, and finally I address the natural gas backup process.

Summary PPA Recommendation

a. ***The four state agencies should approve the PPA.*** The biggest advantage of the executed PPA over the December Draft PPA is that Delmarva has agreed to it. Although I am confident that the December Draft PPA could withstand legal challenge, removing the threat of litigation by Delmarva and its affiliates will allow Bluewater to invest its full financial resources in the hopes of an early opening of the wind farm. Indeed, removing the threat of litigation may result in the wind farm beginning to produce power a year earlier than it would otherwise.

b. In addition, in light of the favorable comparison between the PPA and the market prices, the fact that the project size will not be finalized for up to two years, and other factors, ***Delmarva should consider, and analyze the purchase of, additional offshore wind power during the IRP process.***

1. The Final PPA and the IC report

The Independent Consultant's July 3, 2008, report is notable for the newly, revised higher prices for natural gas and carbon allowance costs, something we have been advocating for more than a year. For example, as compared to December 2007, the IC now forecasts market energy prices to be seven percent higher on average over the term of the PPA, and 21 percent higher in 2014. Indeed, under the high gas scenario, the PPA is projected to result in a savings beginning as early as 2020. Likewise, under the revised carbon allowance price, the reference CO_2 price is projected to reach $70/ton in 2030 (and $100/ton in the high scenario). Thus, under a high fuel/high CO_2 scenario, the project would result in a savings within a few years of opening and continue saving consumers money throughout its life. With the newly revised market prices, the

Delmarva load correction, and the smaller project, the Independent Consultant estimates that under the reference case, the PPA above market price is a mere $0.70 per household per month.

What the IC does not report about prices is perhaps more interesting than what he does report. Comparing the Final PPA figures using late 2007 assumptions in IC's Report, Table 1, to the Final PPA figures using the updated analysis in that same table, one is able to estimate the costs to ratepayers of the December Draft PPA using the updated analysis.[1] As seen in Table A, the above-market price of the December PPA for the SOS load using the updated estimates for natural gas and CO_2, drops the above market price almost in half to only $3.66/month. When one implements the load adjustments and spreads the costs leave an above-market estimate of a mere $1.41 per month.

Table A: December 2007 Draft 450/300 Cap PPA

Load	Assumption	Ave Monthly Estimated Above Market Cost
SOS	Late 2007	$6.46
SOS	Full Update	**$3.66**
Delmarva Service Area	Late 2007	$3.37
Delmarva Service Area	Updated Load	$2.50
Delmarva Service Area	Updated Prices	$1.91
Delmarva Service Area	Full Update	**$1.41**

We can take these estimates and extrapolate and consider the above-market estimates for the initial Bluewater proposal for a 600 MW project with a 450 MW cap during any one hour. We also can analyze the costs of the 600 MW project without a cap. As seen in Table B, even the 600 MW project would have only minimal financial effects on residential customers given cost spreading, new market estimates, and load adjustment.

Table B: Estimated Above-Market Costs of Earlier Considered Projects

Project Size	GWh/year	Ave Monthly Estimated Above Market Cost with Spreading
Final PPA 200 MW	559	$0.70
Draft PPA 450 MW (300 Cap)	1106	$1.41
Bluewater 600 MW Full (450 Cap)	1588	$1.99
Bluewater 600 MW No Cap	1736	$2.16

[1] These are estimates because I am basing the estimates on levelized costs rather than considering each year of the contract separately and then aggregating the data. I use this approximation because the IC did not provide that level of detail in his report. I believe the estimates fairly represent the true figures as evidenced by comparing my load adjusted price when costs are spread—an estimated $2.50 per household per month to the IC's figure of $2.54, as presented on slide 4 of his July 8, 2008 powerpoint presentation to the four state agencies (http://depsc.delaware.gov/documents/IC%20BW-DPL%20PPA%207-8-08.pdf).

In its June 23 Press Release announcing its agreement to the PPA (http://www.delmarva.com/welcome/news/releases/archives/2008/article.aspx?cid=995), Delmarva's President stated that the rate impact for the typical family had been reduced "to about $3.50 per month under the new agreement…." He went on to declare that: "Avoiding higher costs for our customers has been Delmarva's main concern all along." Given that the projected average monthly estimated above-market costs for even a 600MW project with no hourly cap with the costs spread out over all customers in the Delmarva service area—$2.16—is significantly less than $3.50 per household per month that Delmarva deemed acceptable and meeting its "main concern," Delmarva should consider the purchase of additional offshore wind power in the IRP docket and evaluate the merits of such an additional purchase when it brings forward to the Commission its out-of-state, land-based wind PPAs. Purchasing addition al offshore wind power also is consistent with, Delmarva's agreement, subject to state approval, "to implement an optional program that would give Delmarva Power customers the choice to purchase additional offshore wind power" (ibid, Delmarva Press Release). Fortunately, the PPA that Delmarva negotiated on behalf of the ratepayers provides it with the needed flexibility to consider additional purchases as the final project size will not be determined for two years.[2]

2. The State Agencies should seek clarification on three items in the PPA

On June 30, 2008, I filed my initial PPA comments seeking on the record clarification from Bluewater and Delmarva on three pertinent issues in the PPA (see attachment 1). Delmarva has filed an objection to my request, based on its unsupported claim that the PPA is not ambiguous and its contention that, given that this is a contract, we should not inquire beyond the four corners of the contract. In its filing, Delmarva notably fails to explain (a) how "other" project, can mean anything other than "not this" project, despite further references to DEMEC in the most favored customer clause; (b) whether it intended to agree not to contest federal permits related to the offshore wind power project; and (c) whether its ability to back-out of the PPA extends to any change to the Renewable Portfolio Standards Act or only to the recent legislation, SB 328. Delmarva relies, not on judicial opinions regarding contracts approved by public bodies, bur rather, on contract law relating to the very different world of private contracts. Here we have administrative agencies that must decide whether or not to approve the PPA. Surely, they are entitled to inquire as to the meaning of provisions they are being asked to approve. Indeed, to not do so, would be to abdicate the governmental function to private parties.

3. The Question of Backup Generation should be Transferred to the IRP Docket

The earlier decision to direct Delmarva to negotiate with NRG and Conectiv for "any backup firm power that may be necessary when power is not available" was made without staff having first analyzed other potentially feasible options to a natural gas PPA (Order 7199, ¶ 56). The options include (a) ramping up idle natural gas capacity in Dover with minimal transmission upgrades to downstate areas; (b) employing a combination of additional offshore wind power and storage, etc. that might prove more beneficial; (c) building Mid-Atlantic Power Pathway (MAPP) (after the state agencies acted in May, MAPP received interim approvals from the federal government, PJM, and the Governor); or a self-build by Delmarva Power. These

[2] Given that the PPA is premised on a change in law in how offshore wind power renewable energy credits (RECs) are accumulated by Delmarva, an analysis of additional offshore wind power purchases also will need to consider the effect on the state's renewable portfolio standard (RPS).

considerations and any tradeoffs can better be explored in the Integrated Resource Planning (IRP) docket, which is presently before the Commission. Given these "alternative solutions," the state agencies should act on their own prudence and foresight—"while we are in general agreement with Staff's proposal that a gas (or combined cycle) turbine will likely provide the most operational flexibility and cost effectiveness response to staff's stated concerns regarding backup generation, we will not now foreclose an alternative solution to the those concerns" (Order 7199, ¶ 56)—and transfer this matter to that docket.

Moreover, since the time that the hybrid was considered, facts have changed which suggest that the decision in favor of the hybrid approach should be revisited and modified. Because the offshore wind buy is smaller than contemplated—200 MW nameplate capacity, as opposed to 200-300 MW at any one time, with flexibility for a larger project (Order 7199, ¶ 55)—and that if Delmarva receives approval of the land-based wind PPAs that it has negotiated, the wind generation curves will be smoother than an offshore wind only buy (as the wind will blow at different times and at different speeds off the Delaware coast, in western Maryland and in Pennsylvania), the need for backup may be obviated. Moreover, as noted by the consultant, natural gas futures prices on which the May 2007 decision was based are long a thing of the past, thus suggesting that it may not be wise to lock residential ratepayers into a long-term, uncontrolled contract for natural gas supply.

Further, as Willett Kempton and I noted in our Preliminary Comments on the Term Sheets, both the NRG and Conectiv term sheets were less favorable to Delmarva customers than the Conectiv's 2006 RFP natural gas bid despite the requirement that any change from the original bids result in greater price stability, lower price or other benefits for consumers (Order 7199, ¶ 56). Indeed, "they offer no price stability benefits, and despite their backup function, both are even larger than the proposed stand-alone Conectiv plant. In both new gas proposals, all increases in natural gas prices, and all carbon dioxide fees, would be passed through as higher, uncontrolled electricity prices."

Finally, because natural gas will not lead to price stability, I have difficulty comprehending how a PPA that relies on that fuel is consistent with the statutory RFP criteria. For that reason, and because the impetus for a PPA embodying a natural gas plant in the southern part of the state arose from a staff desire rather than a responsive bid, any decision approving such a PPA over the objection of Delmarva or other interested party would be in significant legal jeopardy.

For all of the above reasons, I strongly recommend that this matter be transferred to the IRP docket, with Delmarva immediately conducting a feasibility study that would examine (a) whether additional new generation is needed on the Peninsula; (b) whether natural gas or some other "fuel" (e.g., wind/storage) is the best generation choice; and (c) whether any new generation should be via a PPA or whether it should be a self-build by Delmarva.

Respectfully submitted,

Jeremy Firestone

Attachment 1

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Initial Comment on Executed PPA
Jeremy Firestone
30 June 2008

Introduction

On June 23, 2008, a Power Purchase Agreement (PPA or Agreement) between Delmarva Power and Bluewater Wind for new power generation was executed. Subsequent legislative changes upon which the PPA was premised were adopted by the General Assembly and signed by the Governor on June 25, 2008. Here, in these initial comments, based on a partial review of the PPA, I direct the Commission, the two other Executive Branch agencies, and the Controller General to three areas in the PPA that are ambiguous. I appreciate that Delmarva and Bluewater were negotiating the terms of the revised PPA while the legislative clock was ticking, and thus, ambiguities arose. But now, with time on our side, I look to the decision-making bodies, Bluewater, and Delmarva to help us all avoid doubt.

1. Non-interference provision

Paragraph 13.5 provides that Delmarva "shall not, and shall not cause its Affiliates to, intervene against, challenge or otherwise seek to prevent or overturn the Regulatory Approval of the Agreement (p. 92). "Regulatory Approval" is defined to include a final non-appealable order from the Commission, the two state agencies and the Controller General, and approval by FERC, to the extent such approval is required (p. 24). On its face, this provision does not prevent Delmarva and its affiliates from interfering with federal licensing proceedings before the Minerals Management Service, the Rivers and Harbors Act permit proceedings before the Army Corps of Engineers, the Coastal Zone Management Act consistency determination, and other approvals required of federal, state and other governmental authorities. I call on Delmarva Power and its parent company, PEPCO Holdings, to state on the record that they will not interfere for the purpose, in whole or in part, of delaying or derailing the offshore wind power project that is the subject of the PPA. Given Delmarva Power's lauding of the agreement, I see no reason why they should not.

2. Most favored pricing

Paragraph 4.3"provides that Delmarva ratepayers will get the benefit of a lower price should Bluewater enter into an agreement with a third party for the sale of energy, capacity or RECs from any ***other*** offshore wind energy generating facility within fifty (50) miles from the geographic center of the project prior to September 2012 (financial closing) (p. 56) (emphasis added). Considering this sentence in isolation, one might be hard pressed to conclude that the most favored pricing clause includes contracts that could arise out of an expansion of the present facility (under the PPA, Bluewater has a two-year option to expand the project to up to 600 MW). However, later in paragraph 4.3, the PPA provides that sales to DEMEC under the

DEMEC contract "shall not be subject to" the most favored pricing clause; the same applies to those RECs that are associated with the energy purchases of Delmarva, but which Delmarva is not purchasing. These exclusions suggest that the intent of most favored customer clause was to include any contracts that may arise out of project expansion. I call on Bluewater Wind to state on the record that this latter interpretation of the PPA is its interpretation of the PPA, and for any such order approving the PPA to reflect the same.

3. Delmarva Termination Clause

On June 25, 2008, the State enacted Senate Bill 328 that (a) amended the Renewable Energy Portfolio Standards (RPS) Act to provide Delmarva with 350% credit (3.5 Renewable Energy Credits (RECs) for each MWh purchased under the PPA) and (b) directed the Commission to enact a nonbypassable surcharge with regard to properly incurred over-market costs associated with the PPA. Paragraph 2.5 provides that Delmarva can terminate the PPA if prior to two years of the execution date, the State "amends, modifies, repeals or revokes … legislation (p. 30). The most natural reading of this termination clause is that it refers to Senate Bill 328. However, one could make the argument that it refers to any change to the RPS Act (see paragraph 5.1(a)(vii)). I call on Delmarva Power to state on the record that the former interpretation of the PPA is its interpretation of the PPA, and for any such order approving the PPA to reflect the same.

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